



2021 Transportation Alternatives Call for Projects

Detailed Application (DA) INSTRUCTIONS

Deadline to Submit DA: June 14, 2021

A. INTRODUCTION

TxDOT's 2021 TA Call for Projects involves a two-step application process:

- Step 1** Preliminary Application (PA): When completed, the PA provides high-level project information to determine eligibility and funding opportunities. A separate application is required for each project. Project Sponsors meet with local TxDOT District staff to discuss proposed projects. Project Sponsors receive notification to advance to step 2 and complete the *Detailed Application* for each eligible project.
- Step 2** Detailed Application (DA): When completed, the DA provides detailed project information, including a written scope of work, location map(s), project layout and context, photograph(s), typical section(s), a comprehensive cost estimate, project timeline, property information, overview of potential environmental concerns, and a commitment for local government project funding.

The following Detailed Application Instructions are intended to work in conjunction with TxDOT's 2021 TA Detailed Application and the 2021 TA Program Guide located on the department's website at: <http://www.txdot.gov/inside-txdot/division/public-transportation/bicycle-pedestrian.html>. Each topic in the Detailed Application is presented below with additional guidance and examples, where appropriate. Contact your local [TxDOT District TA Coordinator](#) for further clarifications.

NOTE: Frequently Asked Questions for Step 2 will be posted on TxDOT's [webpage](#) by May 3, 2021. To submit a question, email BikePed@txdot.gov by April 26, 2021.

Project Modifications

It is anticipated that projects will be refined between the preliminary and detailed applications based on the discussion with the district, further evaluation of site constraints, cost estimation, and local priorities. However, **a project submitted in a detailed application in Step 2 should be *substantially the same* project that was initially submitted in a preliminary application in Step 1.** Examples of acceptable project refinements could include:

- slightly extending project limits to a more logical endpoint
- truncating limits to a logical destination to avoid adverse site conditions

- rerouting a project between the original termini to a parallel street with more favorable site conditions
- splitting a project into two phases or geographic areas

Additionally, smaller project elements submitted in Step 1 may be combined into a single detailed application as long as the project sponsor demonstrates in the detailed application how the project segments work together to support bicycle or pedestrian connectivity in their particular community. Whether proposed as an independent project or as an element of a larger transportation project, a proposed project must be a logical unit of work and be constructible as an independent project.

Maps

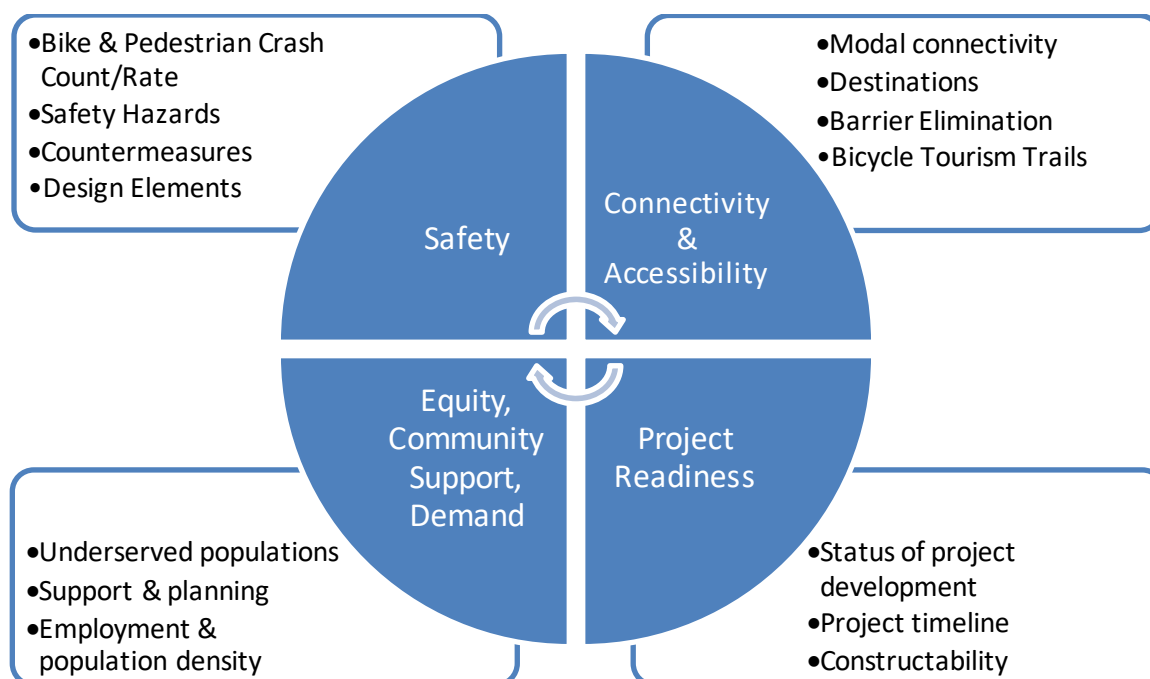
The project sponsor is asked to create several maps to demonstrate the proposed project's benefits to the active transportation system and the community. Project maps can be made simply. Hand-drawn sketches or maps made in PowerPoint, Google Earth, or other free software applications can be just as effective as maps developed using sophisticated software. Maps should be uncrowded, clearly marked, and legibly labeled. Maps should be zoomed in enough to clearly see the location of marked features, such as the locations of safety hazards, connecting facilities, or barriers. Include important street names or landmarks, especially streets along the proposed route and at each endpoint. If a map becomes too busy, then divide the information into two maps.

Project Evaluation and Selection

TxDOT's 2021 TA Program Guide introduces the project evaluation process and selection criteria for the TA funding program. The detailed application is organized to gather specific project details to aid in a technical feasibility review and project evaluation to identify projects for potential award by the Texas Transportation Commission. The evaluation process is intended to identify quality projects that will benefit communities across the state by enhancing the pedestrian and bicycling environment.

Responses to questions 7 through 19 in the detailed application, including supporting maps and documents, will be used to evaluate projects based on their benefits to the transportation system and the community. Information related to issues of project complexity, the project timeline, and the detailed construction budget (questions 28 through 30) will be used to determine constructability and feasibility, components of project readiness. As stated in the Program Guide, criteria category scores will be weighted and weights uniformly applied to eligible projects. Projects will be evaluated against the criteria outlined in the Program Guide with weights generally distributed equally across the four areas indicated below.

Exhibit 1: Transportation Alternatives Evaluation Criteria Categories



B. DETAILED APPLICATION INSTRUCTIONS

Applicant Information

1. Project Sponsor Name
Insert the name of the public entity sponsoring the project in the box provided.
2. Jurisdiction Population (based on the 2010 U. S. Census)
Using information from the **2010 Decennial U.S. Census**, type the population of the jurisdiction in the box provided. Select the smallest population area where the project is located (e.g., city, Census Designated Place, village, or unincorporated area). Once the population is entered, the white box below will automatically populate with **Nonurban** (population areas of 5,000 or less located outside a Transportation Management Area (TMA)), **Small Urban** (population areas of 5,001 to 200,000 located outside a TMA), or **Ineligible** (population areas greater than 200,000 or inside a TMA).

2010 Decennial U.S. Census at:
<https://www.census.gov/quickfacts/fact/table/US/PST045219>

PEOPLE	
Population	
Population estimates, July 1, 2019, (V2019)	
Population estimates base, April 1, 2010, (V2019)	
Population, percent change - April 1, 2010 (estimates base) to July 1, 2019, (V2019)	
Population, Census, April 1, 2010	←

3. Type of Organization/Agency/Authority

In the box provided below this topic, click on the down arrow and select the project sponsor's "Type of organization" from the dropdown menu.

4. Project Sponsor Contact Information (Authorized Representative)

Insert the project sponsor primary contact person's name, title, mailing address, city, zip code, telephone number, and email address in the boxes provided. In the boxes provided to the right, insert the project sponsor's physical address, main telephone number, and website (if available).

The project sponsor's contact person must have the authority to speak on behalf of the project sponsor. This person should have working knowledge of the project and be able to answer questions. Consultants or non-profit representatives should not be listed here.

Project Description

5. Project Name

In the box provided next to this topic, provide the same project name that was provided in the preliminary application. If the project was modified after submitting the preliminary application, then adjust the project name accordingly.

6. Project Location Information

In the box next to **TxDOT District**: click on the down arrow and select the district where the project is located. Refer to topic J of the 2021 TA Program Guide to identify the **TxDOT District**. In the box next to **Texas County**: click the down arrow and select the county where the project is located.

Note: If a project involves more than one county, select the county where a majority of the work will be done.

Indicate if the project is located within a **Metropolitan Planning Organization (MPO)** by clicking on the drop-down arrow and select Yes or No.

Map of MPO boundaries: <https://tinyurl.com/TxDOT2021TAMPOmap>

List of Texas MPOs: <https://www.texasmpo.org/texas-mpo/>

Identify the **project location** using street name, adjacent waterway, or other identifying landmarks or features - include the project limits in descriptive form (from and to).

Google Map Instructions

Applicants must create an updated [Google digital map](#) and provide a map link in the DA. The Google map should only include the proposed project.

- DO NOT include other existing or future bicycle/pedestrian facilities in the Google map, as this map will be used to conduct GIS analysis based on the project location.
- DO update the Google Map if your project limits changed since Step 1.

Minimum requirements for the Google map include:

1. Map Name must include project sponsor's name and project name identified in Item 1 and Item 5 of the detailed application.
2. Map must be made **publicly accessible** on the web.
3. Map must feature a **line** showing the project's complete route. **Points may not be necessary.**

The map may also include line(s) and/or points indicating major construction elements, such as proposed bridges or signals. Several Google tutorial web links are provided below for assistance.

Google Map Tutorials:

Create a new map	https://support.google.com/mymaps/answer/3024454?hl=en&ref_topic=3188329
Add places to your map	https://support.google.com/mymaps/answer/3024925?hl=en
Draw lines and shapes	https://support.google.com/mymaps/answer/3433053?hl=en&ref_topic=3024924
Add/save directions	https://support.google.com/mymaps/answer/3502610?hl=en&ref_topic=3024924
Share, download, or print map	https://support.google.com/mymaps/answer/3109452?hl=en&co=GENIE.Platform=Desktop

The screenshot shows the Google My Maps interface. At the top, the map title is 'ProjectSponser_ProjectName'. Below the title, it says 'All changes saved in Drive'. There are three buttons: 'Add layer', 'Share' (circled in red), and 'Preview'. Below these buttons, there is a section for 'Project Location' with a checked box. Under 'Project Location', there are three options: 'Individual styles', 'Bike Lane' (selected), 'Starting Point', and 'End Point'. At the bottom, there is a 'Base map' section. Three numbered annotations are present: 1 points to the map title, 2 points to the 'Share' button, and 3 points to the 'Bike Lane' option.

1 Map Name should include project sponsor and project name (e.g. *SanAngelo_GreenSt_SUP*)

2 Click "Share":
1) Click slider to "Enable link sharing"; and
2) Copy Google map link for pasting into DA form.

3 The map must feature a **line** showing the project's complete route and points indicating the start and end points. The map may also include line(s) and/or points indicating major construction elements

Multiple locations

If the project involves multiple locations, describe the primary location in the Detailed Application. As an attachment to the nomination, provide a complete list of all improvement locations (including the primary location) using descriptive limits and lengths. Label attachment as **A- Project Location Information** - No more than 2 pages.

Example chart for projects with multiple locations:

No.	Project Location	From/ To	Descriptive Limits	Length (Mile)
1	W Brown St	From To	N Peach St N 14th St	0.56
2	SH 118 (N 5th St)	From To	E Ft Davis Ave E Avenue A	0.57
3	SH 223 (E Hendryx Dr)	From To	SH 118 Antelope Dr	0.40

In the box next to **Project location in relation to roadways**, click on the dropdown menu and select from the following:

- On/along a TxDOT maintained roadway
- On/along a non-TxDOT roadway
- On/along both TxDOT and non-TxDOT roadways
- Not within the right-of-way of any roadway

Project location notes: Projects or segments of projects located within school or park property that are for internal circulation only are **not** eligible for funding in this Call for Projects.

7. Project Description

Provide a brief description of the proposed project, which includes the project location, limits, facility type, and width. Special construction items, such as bicycle/pedestrian bridges, or elements that would affect automobile traffic patterns (new signals, new medians, road diets, traffic calming, etc.) should be included. If the project description does not fit in the box provided, then please shorten. **Only the portion of the project description that is visible in the box provided when the application is printed will be considered during evaluation of the project.** An example Project Description:

Proposed project will construct a 12-foot-wide shared use path (SUP) along the north side of US 171 from Main St to 4th Street in Redding, TX. The proposed SUP will include a pedestrian island, crosswalks, a Pedestrian Hybrid Beacon, and signage to traverse a 5-lane intersection at 4th Street where the path connects to the Sandy Creek Trail. Additional signage and crosswalks will be added to cross two other local streets.

Funding Opportunities

8. Funding Opportunities

Select the funding opportunity sought based on eligibility determined following the preliminary application.

TxDOT reviewed all preliminary applications for eligibility by funding program based on responses provided in the preliminary applications. TxDOT informed all project sponsors of the funding programs for which they are eligible by email during the week of April 12, 2021. Following evaluation and ranking of Detailed Applications, TxDOT may discuss with project sponsors of the highest scoring projects opportunities to be awarded funds for immediate implementation or placed on the Conditional Project List based on initial project ranking, project readiness, and funds available.

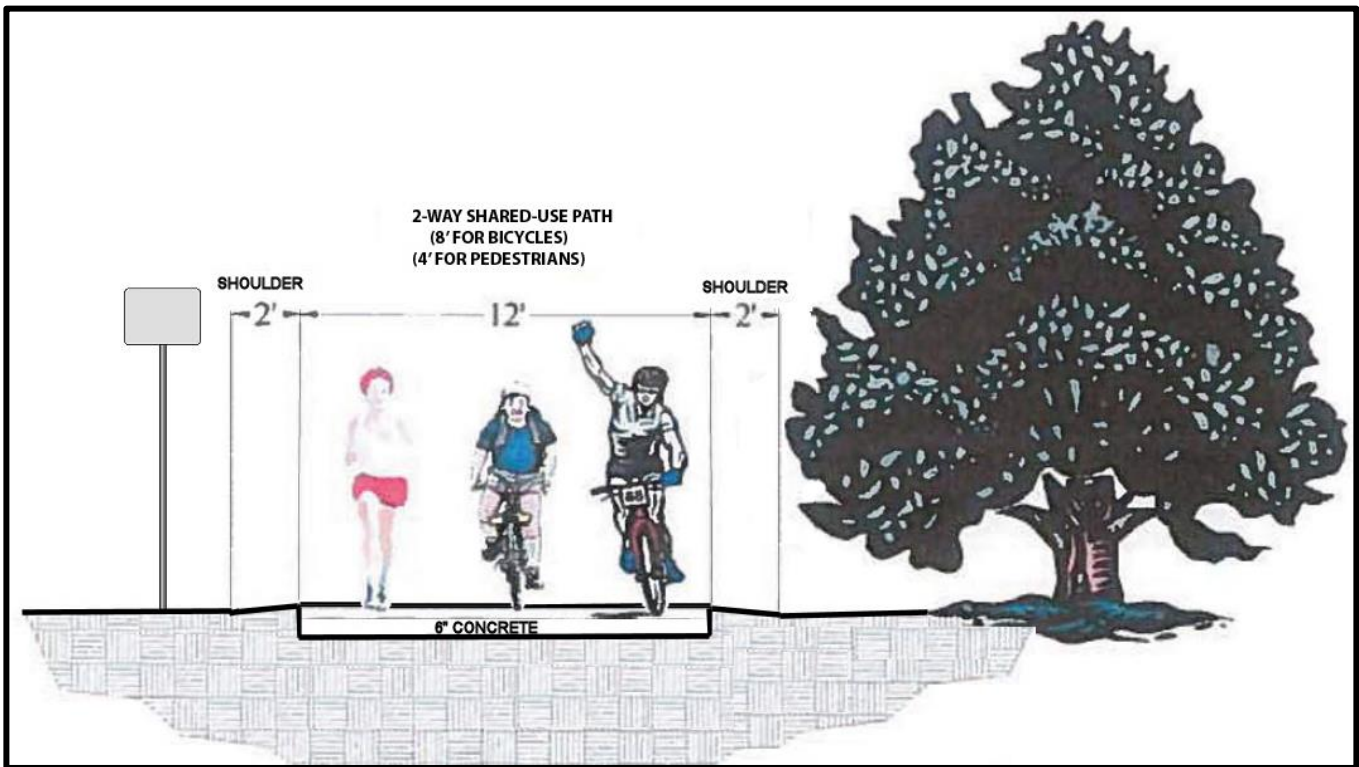
Project Details

9. Project Details

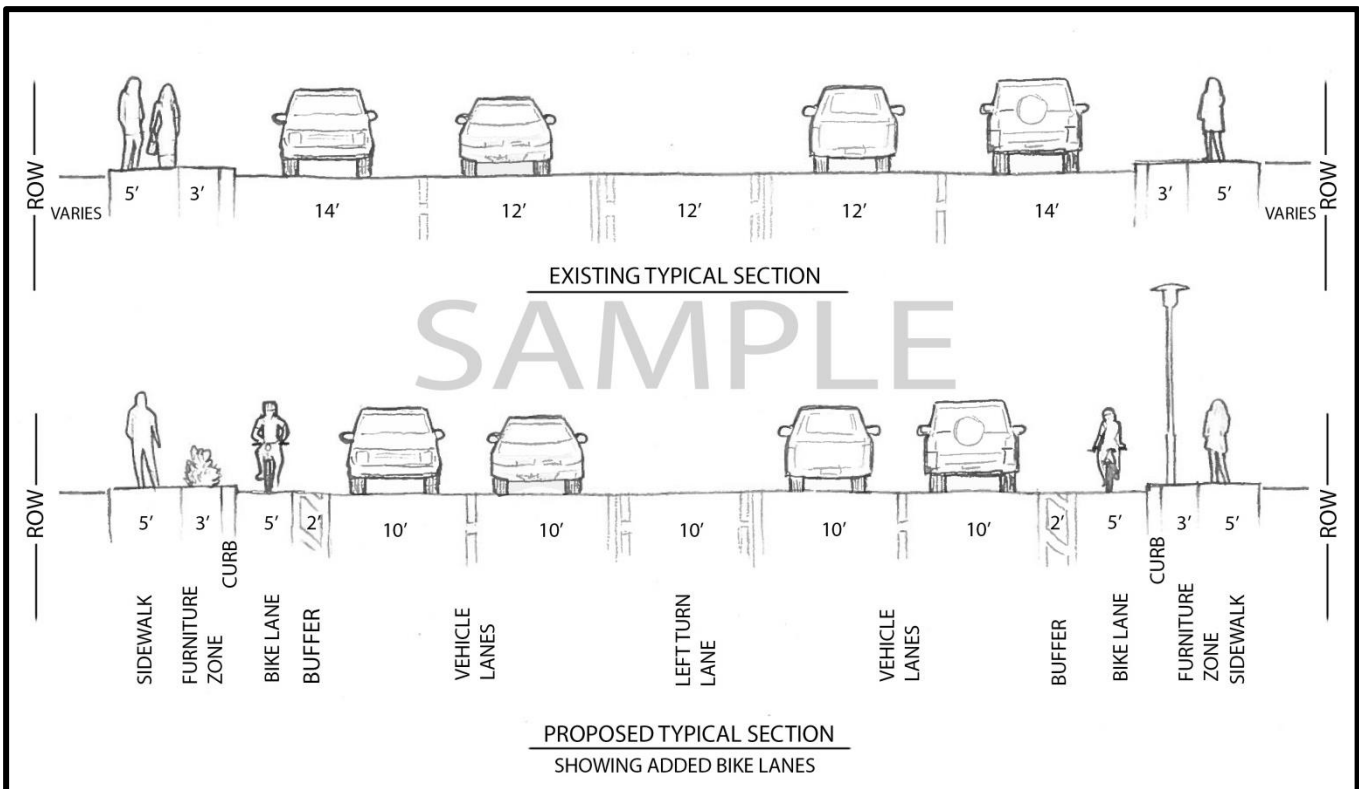
A project layout is required as an attachment. The project layout should be at scale with clearly labeled streets, end points, and construction locations. Additional attachments that are recommended are typical sections, photographs, and other exhibits that describe and provide details about the project. All supporting exhibits submitted must be legible, clearly labeled, and convey useful information. Exhibits may include maps, diagrams, and drawings. Examples are included in the workshop presentation entitled *Best Practices for Detailed Applications* located at: <https://www.txdot.gov/inside-txdot/division/public-transportation/bicycle-pedestrian.html>. Label attachment(s) as **Project Details - Attachment B** - No more than 15 pages.

The department strongly recommends providing typical sections. These exhibits do not need to be professionally prepared. Typical sections help convey the location and design of proposed improvements by showing the type, width, and depth of materials proposed and the project's relationship to surrounding elements. This information is needed to evaluate bridges, bike lanes, shared use paths, and sidewalks. See example typical sections on the following pages.

Example Typical Section 1



Example Typical Section 2



Example Typical Section 3



If the project plans are 30% or more complete, include only example sheets as attachments and provide a weblink for plan review here: <input type="text"/>	
The construction plans for this project are currently: (select) <input type="text"/>	<input type="text"/> % complete

In the box titled **The construction plans for this project are currently:**, click the down arrow and select the status of plan development (Not started, Under development, or Complete).

In the second box, insert the percentage of completeness for the plans, specifications, and estimates (PS&E). If the project plans have not been started, enter zero. If the project plans are 30% or more complete, include only example sheets (no more than 10 pages) as attachments and in the box next to **weblink for plan review here**, provide a web link for plan review (if available). Example sheets could include typical sections, project layout, bridge details, or striping details. A 30% complete plan set should include typical sections, pavement design, a detailed project layout plan, and any special details or designs developed for the project.

Primary facility type: (select) <input type="text"/>	Secondary facility type: (select) <input type="text"/>
Total length: <input type="text"/> (select) <input type="text"/>	Total length: <input type="text"/> (select) <input type="text"/>
Facility width: <input type="text"/> feet	Facility width: <input type="text"/> feet
Material depth: <input type="text"/> inches	Material depth: <input type="text"/> inches
Surface type/material: (select) <input type="text"/>	Surface type/material: (select) <input type="text"/>

In the box next to **Primary facility type**, select the facility type that is the primary focus of the project. If the project has more than one facility type, then select from the dropdown menu in the box next to **Secondary facility type**. The facility types are the same in both dropdowns. For clarification on bikeway types, see topic **L. Bikeway Terminology** in the program guide. (Examples of “Other Safety Improvements” may include traffic calming or safety lighting.)

Under the primary and secondary facility types, enter numbers or select drop downs to provide facility length, facility width, material depth, and surface type/material. Facility width may vary through the project limits, enter the width of the facility through the majority of the project. An example of “Other Safety Improvements” may include upgrade of existing school zone infrastructure throughout a school district.)

Reminder: Only select “Other Safety Improvements” when the project does not include sidewalk or bikeway improvements.

Design Guidelines

All bicycle/pedestrian facilities should be designed to allow for safe, comfortable, and accessible non-motorized activity, be context-sensitive, and accommodate anticipated future growth in walking and bicycling traffic. Surface material type and depth should be durable and substantial to minimize future maintenance costs to the project sponsor and/or other party responsible for maintenance.

Sidewalks should be wide enough to accommodate the volume and type of pedestrian traffic expected in the area. A minimum 5-foot sidewalk width is required and, where the sidewalk is placed immediately adjacent to the roadway curb, a sidewalk width of 6 feet is recommended (particularly when adjacent to a state-maintained roadway). Refer to [TxDOT's Roadway Design Manual](#) for more information on sidewalk details, including instances where sidewalk width may be reduced for short distances. Sidewalks must meet the [2010 ADA standards](#) and should conform to [Proposed Guidelines for Pedestrian Facilities in the Public Right of Way \(latest edition\) \(PROWAG\)](#) as published by the U.S. Access Board.

Shared use paths should be wide enough to accommodate the expected traffic. The minimum paved width for a two-directional shared use path is 10 feet; however, 12-foot-wide or wider is recommended where higher demand is anticipated, particularly in urbanized areas, near schools, and near popular bicycle/pedestrian destinations. Shared use paths should include a 5-foot offset from the roadway or incorporate a physical barrier or railing. Shared use paths must comply with the *Guide for the Development of Bicycle Facilities* (latest edition) as published by the American Association of State Highway and Transportation Officials (AASHTO) and should conform to [PROWAG](#).

All design criteria for on-road bicycle facilities must comply with the latest [TxDOT Bicycle Accommodations Guidance](#) and the *AASHTO Guide for the Development of Bicycle Facilities*. Bicycle lane widths should be 5 feet minimum (in curbed sections). Buffered bike lanes should include a minimum 1.5 foot (2 – 3 foot preferred) striped buffer. Separated bike lanes may incorporate vertical elements of various heights/widths or be vertically or horizontally offset from the roadway. In all cases, attention should be paid to offsets, shy distances, gutter pans, curbs, etc., necessary to incorporate these elements and ensure that roadway and ROW widths can accommodate these features.

Does the project include lighting adjacent to a roadway within state-maintained right-of-way? In the dropdown box provided, select Yes or No.

Consider appropriate safety lighting needed for the project to accommodate usage during all seasons and times of day. Department policy dictates that lighting on state-maintained right-of-way for adjacent paths must be adequate to illuminate the roadway system. It is essential that the project sponsor consult with the department's district personnel to make sure that the project budget allows for this additional cost and that the proposed lighting meets the department's requirement. In the program guide, refer to section **J. TxDOT District Map** and section **K. TxDOT District/Division TA Coordinators** for district contact information.

Does the project include lighting adjacent to a roadway within state-maintained right-of-way?		(select) ▼
Does this project include bridge improvements?	(select) ▼	Total # of proposed bridges: <input type="text"/>
<i>Note: If more than one bridge is proposed, identify the bridge with the longest span length in the detailed application and identify additional bridges in an attachment.</i>		
Structural Materials (Deck/ Beams):		(select) ▼
Bridge construction:	(select) ▼	Bridge length: <input type="text"/> ft Bridge width: <input type="text"/> ft Rail type: (select) ▼

Bridge Facilities

If the project includes a bridge(s), indicate the number of bridges proposed. If more than one bridge is proposed, identify the bridge with the longest span length and provide design details for that bridge in the application using the fill-in and dropdown boxes. Identify additional bridges and bridge details in an attachment (also include the bridge identified in the nomination form in the attachment).

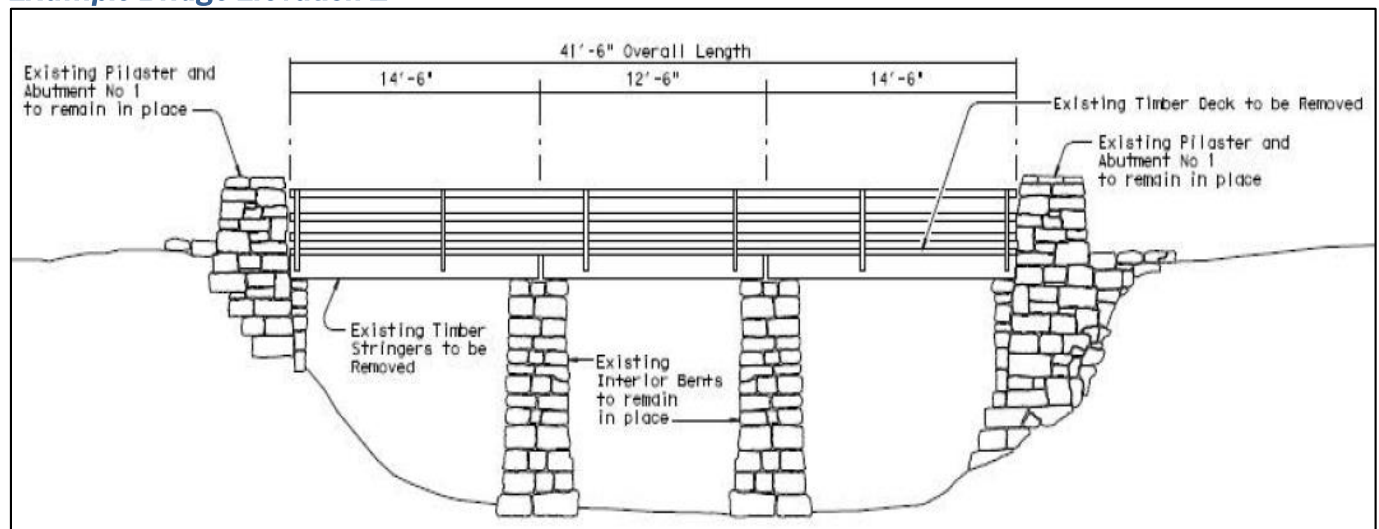
The following chart is included as an example of how to represent additional bridges in an attachment. Additionally, if proposing a prefabricated bridge type, please provide the manufacturer's name to better understand the proposed bridge design.

Identify bridge locations on a map and include as an attachment. If available, additional bridge attachments may include bridge elevations or typical sections. Below is an example of a bridge elevation.

Map ID	Type/Name	Feature Crossed	Bridge Work	Construction Type	Structural Material	Length	Width*	Rail Type	Manufacturer (prefab only)
1	Pedestrian Bridge	Doe Creek	new	On-site	Wood/Wood	40'	10'	Pedestrian	N/A
2	Shared Use Path	Caney Creek	new	On-site	Concrete/Concrete	65'	16'	Traffic	N/A
3	7th Street Bridge	Ave. A	rehab	On-site	Concrete/Steel	80'	40'	Traffic	N/A
4	Shared Use Path	Brays Bayou	new	Prefabrication	Concrete/Steel	120'	28'	Traffic	Acme Co.

* Clear distance inside rail to inside rail

Example Bridge Elevation 1



Note: Pedestrian and bicycle facilities along bridges should incorporate a 1- to 2-foot minimum offset from any rail. Bridge width **MUST** be designed in conformity with the approaching path.

Also, the bridge length should be adequate to accommodate the existing stream hydraulics, where applicable. Provide any available hydraulic evaluation as an attachment.

The project sponsor should consider economic feasibility and aesthetic appeal when selecting bridge construction materials. If a decommissioned highway truss is being repurposed for the project, the Certificate of Eligibility from the State Historic Preservation Office (SHPO) should be included in the nomination package or demonstrate appropriate coordination. For more information about Texas Historic Bridges you can visit: <https://www.txdot.gov/inside-txdot/division/environmental/historic-bridge.html> Additionally, TxDOT's Historic Bridge Legacy Program makes certain historic bridges available for public use once TxDOT engineers determine the bridges are no longer sufficient to carry vehicular traffic. These increasingly rare bridges may create new legacies for the community to enjoy along a shared use path. For more information about this program visit: <https://www.txdot.gov/inside-txdot/division/environmental/adopt-historic-bridge.html>

All design criteria for bicycle and pedestrian bridges must comply with TxDOT's Bridge Design Manual and AASHTO's Load and Resistance Factor Design (LRFD) Guide Specifications for the Design of Pedestrian Bridges (latest edition).

Safety

TxDOT is interested in projects that respond to documented safety issues. TxDOT will analyze crash records to determine the documented bicycle and/or pedestrian crash count and rate in proximity to the proposed project.

10. Identified safety hazards and countermeasures

Check all of the safety hazards located within the project limits. In the blank next to each checked safety hazard, state the proposed countermeasure to address the hazard identified. Clearly identify these features on Map 1 (Label attachment as **Map 1-Safety** and include in **Attachment C**). TxDOT will review hazards and countermeasures for appropriateness and will score projects accordingly. Countermeasures which are not appropriate for the checked safety hazard may not be eligible for funding. All listed countermeasures must be identified in the Itemized Budget (Item 28). Provide additional information supporting the appropriateness of countermeasures to mitigate the identified safety hazard, such as photos and/or narrative, in an attachment. Include any additional countermeasures that do not fit in the blanks provided in the attachment. Label attachment as **C-Safety Hazards and Countermeasures**. No more than 5 pages

<input type="checkbox"/> High roadway speed (45 mph or greater)	Countermeasure...
<input type="checkbox"/> Hazardous intersection/conflict point	Countermeasure...
<input type="checkbox"/> Uncontrolled intersection/crossing	Countermeasure...
<input type="checkbox"/> Lack of bike/ped infrastructure	Countermeasure...
<input type="checkbox"/> High motor vehicle traffic volume	Countermeasure...
<input type="checkbox"/> On-street parking	Countermeasure...
<input type="checkbox"/> Wide roadway crossing (4 or more lanes)	Countermeasure...
<input type="checkbox"/> Lack of lighting	Countermeasure...
<input type="checkbox"/> Other <input type="text"/>	Countermeasure...

One countermeasure may address multiple safety hazards, or more than one countermeasure may address one safety hazard. Please list all proposed countermeasures for each safety hazard identified. Examples of pedestrian countermeasures may include sidewalks, crosswalk visibility markings/signage, raised crosswalks, pedestrian refuge islands, pedestrian hybrid beacons (PHB), rectangular rapid-flashing beacons (RRFB), leading pedestrian intervals, road diets, etc. Examples of bicycle countermeasures may include bike lanes, intersection markings, bicycle signals, etc. The Federal Highway Administration has developed a couple of tools for identifying appropriate countermeasures for bicyclist and pedestrian safety concerns. For more information on safety countermeasures, review the following resources and Appendix B: Additional Safety Countermeasures Resources:

- [FHWA Low Cost Safety Enhancements for Stop Controlled and Signalized Intersections](#)
- [FHWA Countermeasures for Bike Safety](#)
- [FHWA Countermeasures for Ped Safety](#)

11. Infrastructure Elements

Bicycle and pedestrian facilities that are well designed provide enhanced safety. Check all the new bike/ped infrastructure elements that are part of the proposed project. Clearly identify these features on **Map 1- Safety**.

<input type="checkbox"/> closes a gap in bicycle or pedestrian network	<input type="checkbox"/> features traffic markings/signage
<input type="checkbox"/> features new traffic signalization*	<input type="checkbox"/> addresses railroad/highway/water crossing
<input type="checkbox"/> features traffic calming elements	<input type="checkbox"/> new bicycle &/or pedestrian infrastructure
<input type="checkbox"/> separates bicycles &/or pedestrians from motor vehicle traffic	<input type="checkbox"/> includes a vertical separation element (e.g. curb, flexible delineator, bollard)
<input type="checkbox"/> facility is offset from road ($\geq 5'$)	

* must meet warrants

Elements checked in Item 11 should be reflected in the project details including the itemized budget. Be aware of required offsets and widths necessary to accommodate proposed infrastructure elements.

Verify that any proposed safety features will fit within the existing or proposed rights-of-way. Funded projects that cannot be constructed as proposed in the detailed application may be subject to elimination from the TA program.

Traffic control devices such as signs, signals, and markings are designed to regulate, warn, guide, and inform. All pavement markings, signals, and signage must comply with the [2011 Texas Manual on Uniform Traffic Control Devices \(TMUTCD\) – Revision 2](#). *For new traffic signalization, beacons, or school zones, provide supporting documentation indicating that the signals, beacons, or school zones meet warrants/conditions in accordance with TMUTCD and TxDOT policy.

Connectivity and Accessibility

12. Connectivity to destinations

For item 12, check the major destinations to which the proposed bicycle/pedestrian project will provide direct access. The proposed project does not have to directly connect to a destination if the project closes a gap or eliminates a barrier and connects to existing sidewalks or bikeways that provide direct access to the destination.

<input type="checkbox"/> School	<input type="checkbox"/> Community center	<input type="checkbox"/> Fresh foods (grocery stores, farmers mkts)
<input type="checkbox"/> Park	<input type="checkbox"/> Central Business District	<input type="checkbox"/> Health facility (medical center, sports field)
<input type="checkbox"/> Neighborhood	<input type="checkbox"/> Commercial Center	<input type="checkbox"/> Other special trip generator (label on map)
<input type="checkbox"/> Library	<input type="checkbox"/> High density residential	<input type="checkbox"/> Other school facility (label on map)
<input type="checkbox"/> Major employer		

Support the response to this question by clearly labeling the destinations checked in Item 12 and identifying existing non-motorized connections to these destinations on **Map 2 – Connectivity** and insert as an attachment labeled **D - Connectivity**.

13. Connectivity to Multimodal Transportation

a. Select the appropriate response in the dropdown menu to specify whether the project supports multi-modal transportation by connecting to an existing or planned bus stop, rail station, or streetcar.

Support the response to this question by clearly labeling transit stops on **Map 2 – Connectivity**.

b. Select the appropriate response in the dropdown menu to specify whether the project connects to existing or planned bicycle and/or pedestrian facilities. *Planned* facilities must be included in an *adopted* local or regional transportation plan or map. Ideally, the proposed project should connect to existing or planned facilities that serve the same type(s) of non-motorized users. For example, a bike facility should connect to an existing or planned dedicated bicycle facility or shared use path. Clearly draw and label existing and/or planned bicycle/pedestrian facilities on **Map 2 – Connectivity**.

14. Barrier Elimination

Click up or down arrows next to each barrier type to specify whether the project eliminates an existing barrier to travel and provides safe crossing of that barrier by individuals with

disabilities, pedestrians, bicyclists, and other non-drivers of all ages and abilities. If the eliminated barrier type is not listed, check other and enter the barrier type. Please clearly label eliminated barriers on **Map 2 – Connectivity**.

<input type="checkbox"/> 2	ADA barriers	<input type="checkbox"/> 0	Four lane or larger roadways	<input type="checkbox"/> 0	Waterbody(ies)	<input type="checkbox"/> 7	Railroad
<input type="checkbox"/> 0	Other						

Be sure that elements checked under item 14 are addressed in the proposed budget and other areas of the application such as, #25 Railroad Support/Right-of-Entry Letter.

15. Long-Distance Bicycle Routes and Tourism

Please indicate if the project implements a segment or locally favored alternative on the Texas Bicycle Tourism Trail Example Network, improves non-motorized connections between population centers (e.g., cities), and/or extends or develops other regional non-motorized route for tourism.

You can find more information about the Texas Bicycle Tourism Trail Study (BTT) at <https://www.txdot.gov/inside-txdot/modes-of-travel/bicycle/plan-design/tourism-study.html>.

To determine if your project is on the BTT Example Network, please reference TxDOT's Statewide Planning Map at

https://www.txdot.gov/apps/statewide_mapping/StatewidePlanningMap.html.

Provide a map indicating how the proposed project connects to or complements long-distance tourism routes. Label attachment to support your response as **E-Long Distance Bicycle Routes**.

Proposed new bike/ped network infrastructure

Projects that add new off-street bicycle or pedestrian facilities along independent rights-of-way, such as creeks, railroads, or utility corridors, may have different benefits or impacts than projects following the alignment of existing roadways. TxDOT will review the response to Question 7 to determine whether the project is proposed on independent right-of-way.

Geographic Equity

TxDOT is interested in how the project improves access to everyday destinations for underserved communities. TxDOT will analyze US Census data to determine if the project may improve access for seniors, individuals with disabilities, racial or ethnic minorities, people without private vehicles, or low-income communities.

Demand

For Small Urban projects, TxDOT is interested in projects that improve access to higher density residential and/or employment centers. These characteristics have been shown to indirectly relate to higher rates of bicycle and pedestrian users. TxDOT will analyze US Census data to determine whether projects are located in areas with higher residential and employment density.

Local Support

16. Project Sponsor Resolution

An adopted resolution from the project sponsor's governing board is a required attachment to the detailed application. The resolution should declare support of the project, commit to providing the local match (if any), commit to entering into an Advance Funding Agreement with TxDOT (if selected), and commit to developing, implementing, constructing, maintaining, managing, and financing the project (where applicable). This attachment should be labeled **F- Project Sponsor Resolution**. A sample resolution is available on TxDOT's TA funding webpage.

17. Public Involvement and Support

Public involvement is an important indicator of project demand and eventual project success. Preference is given for public involvement that has occurred in the last 5 years.

- a. Provide a brief summary of the public engagement activities for this project with supporting documentation in an attachment labeled **G- Public Outreach and Support**. Tables and bulleted list examples are provided below. Select Yes or No from the dropdown to indicate that you have attached a summary of public engagement.

Chart Example:

Date	Event	Outcome
12/31/2017	Public Meeting - SRTS Plan	Presented proposed Milam ISD SRTS Plan to community; general public support; meeting summary attached
2/14/2019	Open House - Milam MS Trail	Presented trail project to neighborhood; 12 citizens attended; all in support of project; meeting handout attached
3/17/2019	Website and online survey - Milam MS Trail project	50 citizens visited website and took survey; 88% supported the project; survey attached

Bullet List Example:

- 6/1/2019 Meeting with adjacent property owner - property owner agreed to relocate fence to accommodate project construction (letter attached)
- 7/15/2019 Presentation to Milam ISD PTA - MISD passed resolution supporting project (resolution attached)
- 7/17/2019 Presentation to Whispering Oaks Neighborhood Association (WONA) – WONA passed a resolution in support of project (resolution attached)
- 7/20/2019 Presentation to Milam City Council - ordinance supporting the project (ordinance attached)

- 7/27/2019 News article - described community presentations and local support (article attached)
 - 2/14/2020 Letter from Congressman Johnson - expressed support for project (letter attached)
 - 2/16/2020 Letter from Downtown Business Alliance - supports project (letter attached)
 - 2/20/2020 Letter from Mr. Bob Jones - indicated a willingness to enter into negotiations for ROW acquisition (letter attached)
- b. Interagency or public/private/nonprofit partnerships indicate a supportive community network working toward a common goal to achieve successful outcomes. In the blank provided, list all collaborating partners and their role in developing/implementing the proposed project.
- c. Letters of Support. Attach letters of support from stakeholders including elected officials, community leaders, bicycle/pedestrian interest groups, school officials, PTA, adjacent property owners, etc.

Label attachment(s) as **G- Public Outreach and Support**. (max 10 pages)

18. Maintenance and Operation

Project sponsors need to understand the on-going costs of the proposed infrastructure. Refer to the department's LGP Management Guide, Chapter 10 *Project Closeout and Maintenance*.

A project selected by the commission shall be maintained and operated by the project sponsor for the purpose for which it was approved and funded. A project selected by the commission shall be dedicated for public use for the greater of: (1) a period that is commensurate with the amount of federal investment in the project; or (2)

- 10 years, if the amount of federal investment in the project is \$1 million or less
- 20 years, if the amount of federal investment is more than \$1 million.

Project sponsors proposing bridge improvements should consider long-term inspection, monitoring, and maintenance to ensure safety.

If at any time the project sponsor can no longer maintain and operate the project for its intended purpose, the project sponsor shall consult with TxDOT and FHWA as to disposal or alternate uses consistent with the project's original intent.

In the box provided, identify the entity responsible for project maintenance and operation after construction. If an entity other than the project sponsor will be responsible for maintaining the

project after construction, attach a letter from the responsible party committing to long-term maintenance and label it **H – Maintenance Documentation**.

Planning

19. Planning (If applicable)

- a. Indicate whether the proposed project is included in a local transportation plan and include as an attachment only the cover and pages from the plan referring to this project. Examples of local plans may include local or MPO bicycle, pedestrian, safe routes to school, corridor, or traffic safety plan. Projects not identified in a local transportation plan **MUST** provide documentary evidence of support for the project from the community and local jurisdiction. (refer to question 17)

In addition, the project sponsor may include, as an attachment, only the cover and pages from a School District's approved list of Hazardous Routes that identify this project location and provide solutions to the safety issues and/or barriers along the route that prevent students from safely walking to school.

In addition, the project sponsor may provide a link to a transportation plan.

Label attachment(s) as **I- Local Planning** - No more than 10 pages.

- b. Indicate whether the proposed project is included in the project sponsor's Transition Plan for ADA compliance and include as an attachment only the cover and pages from the plan that are relevant to this project.

Label attachment(s) as **I- Local Planning** - No more than 10 pages.

20. Metropolitan Planning Organization (MPO) Transportation Improvement Program (TIP) Inclusion Letter

The project sponsor indicated on Page 1 if this project is located within the boundaries of an MPO. If this project is located within the boundaries of an MPO, include a letter from the MPO to the project sponsor indicating their willingness to immediately include the project in the MPO's TIP, as either a grouped project or individually listed, if funded. Projects that are individually listed in an MPO TIP **MUST** be added at the earliest opportunity to avoid project development delays that could put TA funds at risk of lapse. Most agencies request a minimum of 30 days to review a project proposal and provide a letter of support. Contact agencies early to allow sufficient time to receive a response.

Label attachment as **J- MPO TIP Letter** - No more than 2 pages.

Project Complexity

21. Environmental Documentation

Most bicycle/pedestrian infrastructure projects have minimal environmental impacts and, as a result, qualify as a Categorical Exclusion (CE) under the National Environmental Policy Act (NEPA). However, with any action, impacts may occur whereby more substantial environmental

documentation could be required [Environmental Assessment (EA) or Environmental Impact Statement (EIS)].

CEs are defined in 40 CFR 1508.4 as projects that do not individually or cumulatively have a significant environmental effect.

Some project characteristics have the potential to trigger environmental mitigation, coordination, and/or permitting. Examples of site characteristics that may require additional evaluation (and associated costs) for environmental issues include projects located:

- In publicly owned parks, recreation areas, wildlife/waterfowl refuges
- In publicly/privately owned historical/archeological sites
- Within or around properties listed on the National Register of Historic Places
- Within range and/or potential habitat of state or federally protected species
- On land with likely possibility of encountering hazardous materials
- In areas requiring placement of fill in wetlands/waters of the U.S.
- In the Edwards Aquifer Recharge/Contributing Zones
- In the Coastal Management Zone
- In new right-of-way or previously undisturbed right-of-way

Known historic sites are identified in the Texas Historic Sites Atlas (<https://atlas.thc.state.tx.us/>). Review this resource to identify known historic properties near the proposed project. Historic bridges that may not be on the Texas Historic Site Atlas may be found on the National Register of Historic Places Listed and Eligible Bridges of Texas: <https://txdot.maps.arcgis.com/apps/webappviewer/index.html?id=cc9cf3452a324d0bb961a0c8b4edd898>

A project sponsor is responsible for completing the following tasks:

- Review the proposed project activities to determine if they meet the criteria outlined in 23 CFR 771.117 to be classified as a CE; preparation of an EA may be required for projects that don't meet the criteria for a CE
- Determine the required environmental compliance tasks
- Collaborate with the department representative (typically the department's local district environmental coordinator) to prepare the project scope that outlines the required environmental tasks and associated responsibilities
- Ensure that any required environmental studies, resource agency coordination, and public participation are completed
- As agreed to in the scope, prepare all required documentation that supports the environmental determination (CE, EA or EIS)
- Maintain the project file for submittal to the department

- Document and implement any environmental permits, issues, or commitments

The department's environmental staff will be responsible for coordinating the required environmental studies with the appropriate resource specialists, including relevant specialists at other state and federal agencies, as applicable. For example, impacts to historic properties will be coordinated through the department as part of the project's environmental documentation process. Depending on the nature of the historic property, State Historic Preservation Office (SHPO) coordination can take several months to complete.

For more information on the department's environmental processes please refer to the following resources:

- *Federal-Aid Policy Guide – Environmental Impact and Related Procedures*: <https://www.fhwa.dot.gov/legsregs/directives/fapg/cfr0771.htm>
- *Environmental Handbook for Environmental Assessments*: <http://ftp.dot.state.tx.us/pub/txdot-info/env/toolkit/620-05-gui.pdf>
- *TxDOT's Environmental Compliance Toolkits*: <http://www.txdot.gov/inside-txdot/division/environmental/compliance-toolkits.html>
- *TxDOT's LGP Management Guide Chapter 5*: <http://ftp.dot.state.tx.us/pub/txdot/lgp/procedures/guide.pdf>

Environmental determination approval is a required step in the project development process. A Memorandum of Understanding between FHWA and TxDOT entitled *Concerning State of Texas' Participation in the Project Delivery Program Pursuant to 23 U.S.C. 327 (December 2014)* assigned authority to TxDOT to make FHWA project decisions for assigned projects. Therefore, in most cases, the department (rather than FHWA) will provide the final environmental review and clearance for 2021 TA projects.

The project sponsor is encouraged to work closely with the department's local district environmental coordinator on project scope and environmental documentation requirements. This will significantly facilitate the development and approval of environmental documentation. Once a project sponsor submits required environmental documentation to TxDOT, the department's review, resource agency coordination, and the environmental decision process can take as little as a few weeks or as much as several months. The length of this process depends on the complexity of the project and the completeness and accuracy of submitted information.

Completion of TxDOT's NEPA Scope Development Tool is recommended to identify the level of environmental documentation and any resource assessments/agency coordination needed for the proposed project. Include, as attachments, TxDOT's NEPA Scope Development Tool (if completed) as well as any documentation of prior environmental studies, clearance, or resource agency consultation on the proposed project in **Attachment K– Environmental Documentation**.

If these items are not available, then (at a minimum) attach a list of anticipated potential environmental issues (with map as appropriate), anticipated coordination, mitigation, and/or permits, and the project sponsor's proposed approach to address known environmental issues in **Attachment K– Environmental Documentation** - No more than 10 pages.

22. Property Ownership and Acquisition Information

All proposals **MUST** provide supporting documentation of the project sponsor's property rights by title of ownership, lease, or easement for all property within the project limits. Examples of documentation of right-of-way ownership include ROW maps, deed records, or plats. In the Excel project nomination form, respond to the following questions:

- a. Has the property needed for the project already been acquired?

In the box provide click on the down arrow and select Yes or No.

If No, how many parcels will need to be acquired? Within the nomination form in the text box provided, list the number of parcels needed. **Include a commitment letter from current owner(s) demonstrating a willingness to transfer the parcel/property to the project sponsor in accordance with state and federal laws, if funded.** (See the LGP Toolkit, Form 6-4 of the Best Practices Workbook, for a sample full donation letter with the required language.)

- b. Are there any known encroachments (e.g., utilities, fences, adjacent property improvements)?

In the box provided, click on the down arrow and select Yes or No.

If Yes, identify known encroachments.

- c. Note: Project property acquired after 1971 must have been acquired in accordance with the [Uniform Relocation Assistance and Real Property Acquisition Act \(Uniform Act\)](#).

Was property acquired after 1971 in accordance with the Uniform Act?

In the box provided, click on the down arrow and select Yes or No.

If No, in the text box provided below this topic, briefly describe when and how the property was acquired.

Improvements may be proposed on state-maintained roadway right-of-way (on-system) or on property owned by the project sponsor (off-system).

Note: Projects that include state-maintained right-of-way or have a direct effect on an existing state-maintained roadway **must have a recent letter of consent, addressed to the project sponsor, and signed by the current TxDOT District Engineer (DE)**; this consent cannot be delegated down. The DE letter should be included as an attachment under this topic.

Note: A project that will require the acquisition of real property through the exercise of eminent domain or condemnation is not eligible for participation in TxDOT's 2021 TA Call for Projects.

Label attachments as **L- Property/Ownership/Acquisition** - No more than 10 pages

For requirements and information on how to acquire right of way and accommodate utilities, refer to the department's LGP Management Guide, Chapter 6 *Right of Way and Utilities* (<https://www.txdot.gov/government/processes-procedures/lgp-toolkit/process.html>).

23. Requirements – Signals, Beacons, and School Zones

Certain new traffic control devices, such as new traffic signals, flashing beacons (RRFBs and PHBs), and school zones **MUST** meet warrants and/or conditions prescribed in the Texas Manual on Uniform Traffic Control Devices (TMUTCD) and related TxDOT policies in order to be eligible for reimbursement with federal funds. For additional TxDOT guidance on RRFBs and PHBs, please refer to TxDOT Traffic Safety Division's Memo on the topic [<https://ftp.dot.state.tx.us/pub/txdot-info/trf/pdf/revised-guidelines.pdf>].

Projects that propose a new school zone on a TxDOT road should follow the latest “*Procedures for Establishing Speed Zones*” TxDOT manual, be approved by TxDOT, and passed by either a TxDOT minute order or city ordinance depending on project location. Documentation of school zone approval from TxDOT must be included in the detailed application as an attachment, labeled **Attachment M – Signals, Beacons, and School Zones**.

Include supporting documentation demonstrating that signals, beacons, and school zones meet warrants/conditions in accordance with the TMUTCD and TxDOT policy in **Attachment M- Signal, Beacons, and School Zones**. Items found to be ineligible will be removed from the project scope prior to award and/or letting. *The Procedures for Establishing Speed Zones* is available at: <http://onlinemanuals.txdot.gov/txdotmanuals/szn/szn.pdf>

For projects that are proposing a road diet or changes to vehicle capacity, a traffic study is recommended and should be included in **Attachment M- Signal, Beacons, and School Zones**.

24. Railroad Support/Right of Entry Letter

Does the project encroach or cross railroad right-of-way?

In the box provided, click on the down arrow and select Yes or No.

If yes, the project sponsor **MUST** include documentary evidence from the railroad in support of the project and, where appropriate, a willingness by the affected railroad to enter into an agreement/contract with the local government for project implementation and provisions for right-of-entry for project construction. Where applicable, a cost for railroad work **MUST** be included in the budget.

If the project encroaches or crosses railroad right-of-way, has coordination with the railroad begun?

In the box provided, click on the down arrow and select Yes or No.

Does the project include railbanked railroad right-of-way?

In the box provided, click on the down arrow and select Yes or No.

Railroad crossings of bicycle/pedestrian infrastructure must incorporate appropriate, ADA-compliant pedestrian and bicycle elements, such as planks, crossing arms, etc., to allow for safe crossing of the railroad by non-motorized users.

In addition, coordination with a railroad is a requirement for all projects that are within 50 feet of railroad right-of-way (including grade-separated crossings) and/or all projects that begin or end within 500 feet from an at-grade highway-rail crossing to ensure traffic control and construction do not interfere with an active crossing. Obtaining railroad approval can take several months and in some instances several years.

For projects that meet the threshold for railroad coordination, documentation of railroad coordination must be included as an attachment to the detailed application. At a minimum, this documentation should demonstrate that coordination with the railroad has been initiated and the railroad is in support of the project. Projects with completed railroad coordination documentation or written agreements in place demonstrate a stronger level of project readiness, and these documents should be attached, if available. If the project sponsor has not already been in contact with the affected railroad and received evidence of support via letter or email, the project may not be ready for funding consideration.

All railroad costs **MUST** be included in the Itemized Budget Section. The estimated cost for railroad improvements may include flaggers, permits, insurance, and oversight by the railroad, or costs for the railroad to construct the work on behalf of the project sponsor. Additionally, the railroad may require a fee to conduct plan reviews in advance of issuing an agreement.

Improvements requiring changes to tracks or train activated warning devices **MUST** be completed by the railroad at a cost to the project sponsor.

Note: Some existing/proposed railroad agreements may exceed the 10-page limit; if so; include only the pages needed to demonstrate the status of coordination and responsibilities of the parties.

Label attachment(s) as **N- RR Right-of-Entry/Support Letter** - No more than 10 pages.

25. Project Timeline

Estimate the number of months it will take to complete this project (from the current state of project planning/design through construction). Estimate the time required for each activity listed in the application. Several activities may be accomplished concurrently (such as environmental documentation, PS&E development, and property acquisition); as a result, the **Total Project Development Time Estimate** may be less than the total of the time estimated for each activity.

Label attachment(s) as **O- Project Timeline** - No more than 2 pages.

Provided on the following pages are guidelines to help project sponsors develop their timeline chart and enter the estimated time for each activity listed in topic **25. Project Timeline** in the 2021 TA Detailed Application. The estimated timeframes below are based on similar federally funded projects and are only intended to serve as guidelines. They are in no way a

representation of the actual timeline for your specific project. Additionally, project sponsors are encouraged to review the Enhanced Cost Estimate and Project Development Procedures for MPOs: Final Report for further project timeline guidance.

<https://library.ctr.utexas.edu/hostedpdfs/tamuk/0-6929-1.pdf>

Time estimates provided by the project sponsor in the detailed application should be reasonable projections; however, these time estimates may need to be adjusted based on project activities. For selected projects, an appropriate timeline will be agreed upon between the department and the project sponsor and made part of the local agreement.

- **Planning Activities** (minimum 6 months; typical 6-12 months)
(Include the project in the Statewide Transportation Improvement Program (STIP), execute local agreement (Advance Funding Agreement (AFA)) between the department and project sponsor, complete required local government training, assign local government and department roles and responsibilities, etc.)

Planning activities will vary depending on the project type, current status of project development, project letting (local/department), and whether any pre-construction costs are being proposed for federal reimbursement (only eligible for project sponsors with populations under 50,000).

Project sponsors with projects located within the boundaries of an MPO will be required to submit their project to the MPO for inclusion in the local Transportation Improvement Program (TIP), a process that can take days (for grouped projects) or several months (for individually listed projects). For projects that are individually listed, the project must be listed in the local TIP before the project can be added to the STIP. For projects located outside the boundaries of an MPO, the local TxDOT District will be responsible for including the project in the department's rural TIP and STIP.

During the planning phase and as part of negotiating the AFA, project sponsors will be expected to become qualified in accordance with TxDOT's Local Government Project Program (LGPP), undergo a risk assessment which will be initiated by TxDOT, and provide information to receive a Special Project Approval to oversee elements of the project (as applicable). Additional information on Local Government qualifications, Risk Assessment, and the Special Project Approval is available at the following website: <http://www.txdot.gov/government/programs/local-government-projects.html>. Refer also to TxDOT's 2021 TA Program Guide.

The department will draft the AFA for execution by the project sponsor's governing board (e.g., city council or commissioners court) and the department. Upon full execution of the AFA, the department will provide written authorization to the project sponsor to proceed with project development. These department-led activities (TIP, STIP, and execution of the local agreement) can take 6 to 12 months to complete.

- **Project Design and Plan Preparation** (minimum 6 months; typical 6-24 months)
(Solicit, select, negotiate, and execute contract(s) for engineering and environmental services. Develop construction Plans, Specifications, and Estimates (PS&E) to state

and federal standards. Include time for review by department district and division staff, a Registered Accessibility Specialist (RAS), and other agencies as needed.)

Refer to the department's [LGP Management Guide](#), Chapter 2 *Project Initiation*, Chapter 4 *Preliminary Engineering and Design*, and Chapter 7 *PS&E Development* to obtain a better understanding of the required tasks and time to complete this phase.

The project sponsor is responsible for plan preparation, environmental documentation, and other design-related activities including required reviews. See Environmental Clearance discussion below for timeline information on that process.

Federal participation in the project development phase may be granted if costs to develop PS&E and environmental documentation are included in the project award for an eligible project sponsor with population under 50,000. If consultant services are authorized, then the pre-procurement activities must be overseen/reviewed and approved by the department for compliance with state and federal requirements in order to be considered eligible. These requirements are outlined in the department's LGP Management Guide.

If project development costs are authorized for federal participation, the project sponsor is required to submit plans to the department for review at progressive stages of development to ensure that state and federal standards are met (e.g., 30%, 60%, 90%, and 100% completion). For all other projects (i.e., those without federal participation for preliminary engineering activities), design reviews should occur at agreed-upon stages of development. Contact your local TxDOT district office to establish expectations.

If the estimated construction cost of the project is \$50,000 or greater, the project must be reviewed by a RAS that is licensed by the Texas Department of Licensing and Regulation (TDLR). This may require an additional two months in the review process. As a result, include a minimum of three months for TxDOT's final plan review.

- **Environmental Clearance** (minimum six months; typical 6-18 months)
(Tasks include: completing the Work Plan Development Tool, environmental documentation, and appropriate resource studies; consider environmental mitigation, permits, public involvement, and review by resource agencies). All documentation and exhibits must meet state and federal standards. See LGP Management Guide, Chapter 5 *Environmental Compliance* (<http://ftp.dot.state.tx.us/pub/txdot/lgp/procedures/guide.pdf>).

For projects with minimal environmental impact, like most bicycle and pedestrian projects, the environmental evaluation can be initiated at the same time as design development. In general, for federally funded projects, the environmental document is approved prior to right-of-way acquisition.

Completion of TxDOT's NEPA Scope Development Tool is highly recommended to identify the level of environmental documentation and any resource assessments/agency coordination needed for the proposed project. If the project is located within or adjacent to a potentially eligible National Register historic

site/district or protected species habitat, include additional time (from a few weeks to several months) for review by appropriate resource agencies. For more information on environmental documentation requirements review **Item 21. Environmental Documentation** in this document. Consult with local TxDOT district environmental staff for clarification.

- **Right-of-Way (ROW) Acquisition** (acquisitions should occur after environmental clearance)

(Include time for surveying, appraisals, title transfer, etc. Only incidental utility adjustments may be eligible for federal participation.) Refer to the department's LGP Management Guide, Chapter 6 Right of Way and Utilities (<http://ftp.dot.state.tx.us/pub/txdot/lgp/procedures/guide.pdf>).

In general, environmental clearance occurs prior to ROW acquisition for federally funded projects. Once the ROW boundaries are established, preliminary steps toward acquisition, such as surveying and appraisals, can begin. After environmental clearance is obtained, ROW acquisition can be completed. However, if a local government project sponsor chooses to use its own funds for advance property acquisition (i.e. prior to environmental approval) without seeking federal reimbursement, the local government can do so subject to the guidance in Chapter 3, Section 6 of the department's [Right of Way Manual Vol. 2](#).

Consult with your local TxDOT TA Coordinator for additional clarification. All project ROW acquisitions must be evaluated in an appropriate environmental document. Additionally, all acquisitions must comply with the 1971 Uniform Act. For additional property acquisition guidance, review topic **22. Property Ownership and Acquisition Information** in these instructions and the 2021 TA Program Guide.

Only minor, incidental utility adjustments (e.g. relocation of a street light, fire hydrant, or surface drainage inlet) are eligible and may be included as part of the project. Major utility adjustments (e.g. installation of a drainage system, relocation of power lines) should be completed in advance of project construction letting. Allow for sufficient time to conduct utility adjustments prior to letting if minor adjustments cannot be included in the construction contract for the TA project.

- **Project Construction/Implementation** (Minimum 12 months; typical 12 to 36 months) (Construction letting, award, construction, project close-out, and maintenance)

(Include time for advertising, procurement of construction contractor, contract negotiations, site preparation, construction, inspection, project close-out, etc.) Refer to the department's LGP Management Guide, Chapter 8 Letting and Award, Chapter 9 Construction, and Chapter 10 Project Close-Out and Maintenance <http://ftp.dot.state.tx.us/pub/txdot/lgp/procedures/guide.pdf> to better understand required tasks and durations.

The project sponsor should incorporate a minimum of two months in advance of construction letting to finalize bid documents, advertise, and award the construction project.

- **Railroad Coordination (1 to 2 years)**- Railroad coordination is an example of additional work that may be required for projects located along or crossing railroad rights-of-way. Railroad coordination can take as long as two years to complete. Initiation of coordination with railroads prior to submitting the detailed application is necessary to understand the process, permits, costs, and requirements expected by the railroad company.
- **Other** – Describe briefly in the detailed application any additional project milestones not already identified.
- **Total Projected Time Estimate in Months**

Due to an overlap of some project activities, the total projected time estimate will be less than the total of the time estimated for each individual project activity. Below are example timeline charts (A, B, and C) that outline milestone activities from very simple as shown in Chart A to more detailed as seen in Charts B and C. Example **Chart A** will be available on the department's website at:

<http://www.txdot.gov/inside-txdot/division/public-transportation/bicycle-pedestrian.html>.

In addition to completing item **25. Project Timeline** of the Detailed Application, project sponsors must provide a timeline chart as an attachment. **Chart A** below shows the minimum level of detail that should be provided. The detail of the project timeline should be consistent with the status of project development. Development of a timeline chart demonstrates that the project sponsor understands the process and is willing to establish a proposed construction letting date.

Label attachment(s) as **O- Project Timeline** - No more than 2 pages.

TASK	2017	2018				2019				2020			
	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
PLANNING													
PROJECT DESIGN AND PLAN PREPARATION													
ENVIRONMENTAL CLEARANCE													
ROW ACQUISITION													
PROJECT CONSTRUCTION/IMPLEMENTATION													

Chart A

26. Has this project or a substantially similar project been submitted under a prior TxDOT TA or SRTS call for projects?

For TxDOT evaluators, it is helpful to understand which projects have been submitted before to better evaluate project changes from one program call to the next. If a project was submitted to a previous TxDOT TA or SRTS program call, please select the program call from the dropdown.

Reminder: All responses in the Detailed Application MUST be supported by the attachments. Proposed countermeasures and infrastructure elements MUST be specified in the Itemized Budget. Items missing supporting documentation will not be considered during project evaluation.

Itemized Budget Section

27. Itemized Construction Cost Estimate

Provide a detailed cost estimate of all construction costs using appropriate units (e.g., square yards (SY), square feet (SF), linear feet (LF), lump sum (LS), each (EA), etc.). Be as specific as possible and include TxDOT or local government bid items and codes, if known. Additionally, project sponsors are encouraged to review the Enhanced Cost Estimate and Project Development Procedures for MPOs: Final Report for further cost estimation guidance.

<https://library.ctr.utexas.edu/hostedpdfs/tamuk/0-6929-1.pdf>

Work activities in the itemized construction cost estimate should reflect responses to earlier project detail questions in the detailed applications such as connectivity, safety countermeasures, bridges, railroad, etc. For safety projects, items such as pavement markings (e.g., bike lanes, crosswalks, and painted bicycle symbols), traffic calming measures (e.g., speed humps, traffic circles, pedestrian refuge islands), vertical delineators (e.g., concrete curb, flexible delineators, ceramic buttons), and traffic control devices (e.g., signage, traffic signals, pavement markings, accessible pedestrian signals, pedestrian hybrid beacons) should be itemized. Projects may include ADA compliant curb ramps, detectable warning panels, driveway modifications, etc. to improve accessibility. Barrier crossing infrastructure could include items such as railroad planks, rehabilitation/modification of existing bridges, or new bridges/culverts for non-motorized users. Material type, construction method (e.g., reinforced concrete, steel beam, wood beam, truss), and dimensions (e.g., length, width and thickness) help demonstrate the use of durable, low-maintenance materials. A well-developed budget demonstrates an understanding of the scope of work proposed, as well as material and construction activity costs. This information helps the project sponsor gain a better understanding of the project costs and activities and minimize project overruns.

The department maintains a list of average low bid unit prices on its website for highway construction projects. Costs are presented in multiple formats allowing the public to evaluate

regional and seasonal trends in prices. Visit: <http://www.txdot.gov/business/letting-bids/average-low-bid-unit-prices.html>. Most TA projects will be smaller in scale than typical roadway construction projects; consultation with experienced professionals may provide insight regarding cost differences. Inflation of bid item costs to the year of expenditure should be considered. Consult suppliers, construction contractors, or other professionals as needed to develop a comprehensive estimate.

The total amount of TA funds awarded to a project by the commission is fixed, based on the estimated construction budget provided in the detailed application. Therefore, the budget must be comprehensive and consider all phases of construction. Actual construction activities and quantities are expected to be refined during the design phase of project development. To ensure funding is adequate to construct the project, guidance from a professional experienced in delivering the type and scale of projects similar to the proposed activity in Texas is recommended.

Note: For funded projects, the project sponsor is responsible for 100% of the cost overruns above the awarded amount. Recent rule revisions may allow additional federal funds to be applied to a project with overruns, but only if there is available funding. Per 43 TAC § 11.411

(d) The commission will award an amount of TA Set-Aside funds for each project. If program funds remain or are returned to the program due to cost underruns, the responsible division administering the program may apply those funds to project overruns based on:

- (1) justification of overruns;
- (2) timing of request;
- (3) availability of funds;
- (4) a reasonable expectation of the ability of the project sponsor to complete the project; and
- (5) if overrun requests exceed available funds, the criteria applicable to the use of state funds under §11.406(b) of this subchapter (regarding eligibility for TDCs).

The proposed budget should be inclusive of all items of work during construction. Items that should not be overlooked include mobilization, site preparation, erosion control, lighting, and traffic control. For areas where substandard conditions will be upgraded to meet current standards, include costs associated with demolition of deficient elements. Consider incidental environmental mitigation, such as stormwater control or remediation of hazardous conditions (e.g., lead paint removal or stabilization, excavation of contaminated material). Incidental environmental remediation costs not identified in the detailed application and approved as part of a project will not be eligible for federal reimbursement.

Incidental items, such as landscape replacement, minor drainage improvements, minor environmental mitigation, and minor utility adjustments may not exceed 30% of the project's total itemized construction budget. Bicycle/pedestrian-related amenities, such as drought-tolerant shade trees, street furniture (e.g., benches, trash receptacles), wayfinding signage,

and decorative lighting, should comprise no more than 5% to 10% of the total itemized construction budget, depending on the size and context of the project. All incidental items and amenities combined may not exceed 30% of the itemized construction cost. In order to be reimbursed by federal funds, incidental items and amenities should be included in the Itemized Construction Cost Estimate in the detailed application.

A contingency cost is allowable for projects with less than 60% complete PS&E. The contingency cost may range from 5% to 15% (maximum) depending on the size and complexity of the project. In order for actual costs incurred to be allowable, they must comply with cost principles and other federal and state requirements, be necessary and reasonable for proper and efficient accomplishment of the approved project, and be verifiable from the project sponsor's records. Amounts for major project scope changes, unforeseen risks, or extraordinary events are not considered contingency.

28. Additional Construction-Related Costs

Additional construction-related costs may differ depending on whether the project is let for construction by the project sponsor or by the department. For projects let by the project sponsor, construction engineering and inspection, construction-phase project administration, or contract administration may be appropriate; whereas the project sponsor may have fewer responsibilities for projects let for construction by the department. Additional services supporting construction may be necessary, such as land survey for right-of-way demarcation, materials testing, permitting, or geotechnical work. Items ineligible for reimbursement should not be included, such as activities associated with right-of-way acquisition (e.g., appraisal, parcel survey, title transfer) or legal services.

29. Preliminary Engineering (PS&E and Environmental) Costs

For project sponsors with populations under 50,000, eligible cost(s) to develop PS&E and environmental documentation may be requested and included in the project budget. If requesting the use of TA funds for project PS&E and environmental documentation costs, enter the item and an appropriate amount in the space provided.

Any costs incurred by the project sponsor before project selection or before authorization to proceed by TxDOT are not eligible for reimbursement. An eligible cost may include only actual and documented costs incurred by the project sponsor for the development of project plans, specifications, & estimates (PS&E) including environmental documentation.

If the project sponsor will be hiring a consultant engineer or architect, the hiring process **MUST** meet federal procurement requirements outlined in the LGP Management Guide, Chapter 4 *Preliminary Engineering and Design*. Some of the requirements include TxDOT approval of the procurement process, documentation, and contract. State and federal regulations must be followed for costs to be eligible for consideration for reimbursement.

Provide documentation of estimated PE costs. Label attachments **P – Preliminary Engineering (PS&E and Environmental) Costs** - No more than 2 pages.

Budget Summary

30. Project Budget Summary

The project Budget Summary on page 10 will automatically fill-in total construction costs on lines 1-3, based on the itemized construction costs entered on pages 7 through 9 of the detailed application. A 15% cost for TxDOT's Direct State Costs for project oversight will automatically fill-in on line 4 (based on the *Total Construction Cost Estimate* on line 3).

For projects located in communities with populations under 50,000 (eligible for PS&E cost inclusion) the Preliminary Engineering Cost provided on page 9 will appear on line 5.

For projects where no Economically Disadvantaged County Program (EDCP) reduction nor Transportation Development Credits (TDCs) are proposed, the project sponsor has the option to increase the local match. To increase the local match, click on the percentage shown in the box next to Optional Local Match Increase and enter an adjustment above 20%. The federal percentage at the bottom of the page will adjust automatically along with the federal and local match participation amounts. You may have to click on another page of the form and return to page 10 before this field updates.

For projects eligible for TDCs, the project sponsor can select the entity name from the dropdown. For more information about TDCs, please refer to the Program Guide, page 10.

For projects eligible for EDCP, in the box **Allowable EDCP Adjustment**, click on the down arrow and select the county where the project is proposed; for projects that include multiple counties, identify the county where a majority of the work will be done; if the project is identified for potential award, TxDOT will contact the project sponsor to pro-rate the EDCP reduction based on the location of the project. Additional EDCP adjustment can be added by clicking on the down arrow and selecting the percentage increase. The form will not allow greater than 95% EDCP reduction in local match. EDCP reduction is state funding paid on behalf of the project sponsor to supplement the local match. Selecting EDCP will automatically force 80% federal and 20% local/state participation.

Note: Not all TA project activities qualify for TxDOT's Economically Disadvantaged Counties Program (EDCP) reduction. Visit TxDOT's EDCP website: <http://www.txdot.gov/inside-txdot/division/transportation-planning/disadvantaged-county.html>.

Discuss potential use of EDCP with the local TxDOT district office. The department reserves the right to deny an EDCP reduction when the project activities do not qualify.

The Excel nomination form will automatically calculate total project costs, as well as local, state, and federal participation amounts. Review the costs on page 10 in conjunction with the Cost Participation Summary on the top of page 11.

Cost Participation Summary

The cost participation summary for federal, state, local cash participation, and total project value/estimated cost will automatically populate on the top of page 11 of the nomination form.

TA Project Commitment

Recipients of federal funds must comply with numerous state and federal requirements. In this section, the Project Sponsor certifies that they are aware of certain aspects of these procedural requirements. Refer to TxDOT's 2019 TA Program Guide and TxDOT's 2021 TA Detailed Application Instructions appendices for additional information about these requirements.

By submitting an application, the project sponsor commits to executing the local agreement (i.e., AFA) and forwarding to the department its local match for the preliminary engineering phase of work within one year of selection. For awarded projects, the project sponsor agrees to produce the complete plan set as outlined in topic **26. Project Timeline** or an appropriate timeline agreed upon between the department and the project sponsor and made part of the local agreement.

Note: TA funding is time-sensitive; each project must advance to construction within three years from the date of selection by the commission or the project may be terminated.

The application must be signed by a representative of the local government who has signature authority. In addition to signing the form, print the signatory's name, title, date, and telephone number.

C. DETAILED APPLICATION SUBMITTAL DEADLINE/DELIVERY INSTRUCTIONS

Detailed Applications must be submitted in the form prescribed by the department in accordance with the program rules as detailed below. The complete detailed application package must be received by the department, via TxDOT's Box.com file sharing service, no later than **5:00 p.m., CDT, on Monday, June 14, 2021**. A complete application, with attachments, is required for each project proposed. Supporting documents must be in 8 ½" X 11" formats. Label attachments in the upper right-hand corner as prescribed in the Detailed Application Instructions above and in the Detailed Application. The 2021 TA Detailed Application is available at:

<http://www.txdot.gov/inside-txdot/division/public-transportation/bicycle-pedestrian.html>

Note: The department recommends submitting Detailed Application(s) to TxDOT's Box.com file sharing service early to ensure delivery before the submission deadline.

Detailed Application Package:

1. The original 2021 TA Detailed Application completed in Microsoft Windows Excel (.xlsm) and delivered to the department in its original .xlsm format.

Deliverable 1: One Excel file in its original format.

2. The completed 2021 TA Detailed Application (pages 1-11) plus all of the application's supporting documents converted to an Adobe Portable Document Format (PDF) and combined into one complete file. The complete PDF file **MUST** include a copy of the TA funding page (p. 11) **signed** by an authorized representative of the local government. All original documents must be provided in a color Adobe PDF format 8 ½" X 11".)

Deliverable 2: One complete PDF file in color (11-page 2021 TA Detailed Application, signature page, and attachments, with a file size of 50MB or less).

Project Submission to the Department:

The complete 2021 TA application package (Excel file plus PDF file) must be submitted to TxDOT using the department's Box.com file sharing service.

File Name:

To allow the Department to match detailed applications to an eligible preliminary application, the PDF and Excel files must be labeled with the Project ID provided to the project sponsor by email from TxDOT on or about April 12, 2021. Example Project ID:

- 1_WAC_Dalton04_Glidden EL Sidewalks.pdf
- 0_BRY_Henderson01_East Henderson SUP.xlsm

NOTE: While using the naming convention above will work for the vast majority of projects, if the project proposed in the detailed application has been refined from that which was proposed in the preliminary application, a modification to the file name may be created by the project sponsor. In these situations, new file names must include all text and numbers before the abbreviated project name and then a short file name created by the project sponsor to reflect the modified project as demonstrated below.

- 1_WAC_Dalton04_[*new short name*].pdf
- 0_BRY_Henderson01_[*new short name*].xlsm

Box.com Instructions:

Submit your project to TxDOT's Box.com by clicking the following file request link:

<https://txdot.app.box.com/f/036c95fc6c934319abf0c18e17c9ab24>

The above web address is provided as a hyperlink in the PDF version of this program guide. After clicking the above link, follow the instructions to submit the Detailed Application components to TxDOT.

1. **Project Sponsor Name and Contact Name**

Provide the name of the sponsoring entity (e.g. city or county name) and the name of the primary contact person.

For example: City of Round Rock, Judith Jones

2. **Project Sponsor email address**

Enter the project sponsor email address.

For example: MayorJones@RoundRock.gov

3. **Upload the Detailed Application form in original Excel format (.xlsm)**

Either (1) use the “Select Files” button to locate the files on your computer to open and load; or (2) Drag and drop files into the upload box. The .xlsm file should be named using the Project ID provided by email from TxDOT on or about April 12, 2021.

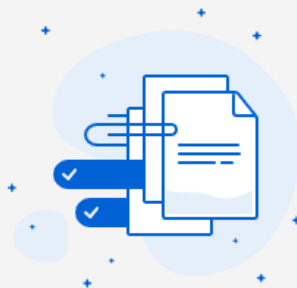
4. **Upload Combined PDF (Detailed Application form, signed funding page, and attachments)**

The .pdf file should be named using the Project ID provided by email from TxDOT on or about April 12, 2021. Combine all files into a single, 8 1/2 x 11 color PDF (max 50 megabytes). Either (1) use the “Select Files” button to locate the files on your computer to open and load; or (2) Drag and drop files into the upload box.

5. **Click Submit**

Once you have clicked the **Submit** button, file upload progress can be viewed, followed by a confirmation screen similar to the image below. **In the 5 business days following the final June 14th deadline, the project sponsor submittal email address will receive a follow-up email confirmation that the files were officially received by the department.**

Success! Your files have been submitted.



D. DETAILED APPLICATION CHECKLIST

Below is a list of required attachments that **MUST** be included as part of the TA 2021 detailed application package and additional attachments that may be necessary. The need for *additional attachments* should be determined by the characteristics of the project, its location, and the status of project development.

Required attachments:

- **B** - Project Details
- **C** - Safety Hazards and Countermeasures
- **D** - Connectivity
- **F** - Project Sponsor Resolution
- **G** - Public Outreach and Support
- **L** - Property Ownership/Acquisition
- **O** - Project Timeline
- **Map 1:** Safety
- **Map 2:** Connectivity

Additional attachments that may be necessary:

- **A** - Project Location Information
- **E** - Long Distance Bicycle Routes
- **H** - Maintenance Documentation
- **I** - Local Planning
- **J** - MPO TIP Letter
- **K** - Environmental Documentation
- **M** - Signal, Beacons, and School Zones
- **N** - RR Support/Right-of-Entry Letter
- **P**- Preliminary Engineering (PS&E and Environmental) Costs

The department recommends completing the checklist on the following pages to ensure a complete detailed application package is submitted.

Detailed Application Checklist:

- ☐ **Required:** A completed **2021 TA Detailed Application** in Microsoft Windows Excel (.xlsm) format with all text boxes filled-in and dropdown selections completed. Type N/A for not applicable, where appropriate.
- ☐ **Required:** A single, color PDF document that includes:
 - ☐ Completed 2021 TA Detailed Application (required)
 - ☐ Signed copy of signature page (p. 11 of the Detailed Application) (required)
 - ☐ Required attachments
 - ☐ Additional attachments that may be necessary
- ☐ **Attachment A – Project Location Information (as applicable)**

Refer to **6. Project Location Information**. If project involves multiple locations, attach a complete list of all improvement locations using descriptive limits.

Label attachment as **A- Project Location Information** -No more than 2 pages.
- ☐ **Attachment B – Project Details (required)**

Refer to **9. Project Details**

Attach the following exhibits:

 - ☐ Typical section(s) (recommended)
 - ☐ Representative construction plan sheets (as applicable)
 - ☐ Additional bridge details (as applicable)
 - ☐ Photographs (recommended)

Label attachment(s) as **B- Project Details** -No more than 15 pages.
- ☐ **Attachment C – Safety Hazards and Countermeasures (required)**

Refer to items **10** and **11**.

Attachment C must include **Map 1- Safety** identifying safety hazards and infrastructure elements.

Attachment C may also include:

 - additional information supporting the appropriateness of countermeasures to mitigate the identified safety hazard, such as photos and/or narrative.
 - any additional countermeasures that do not fit in the blanks provided.

Label attachment(s) as C- Safety Hazards and Countermeasures.
- ☐ **Attachment D – Connectivity (required)**

Refer to Items **12** through **15**.

Attachment D must include **Map 2- Connectivity**, which identifies all elements from Items 12, 13, and 14.

Label attachment(s) as **D- Connectivity** - No more than 2 pages.

☐ **Attachment E – Long Distance Bicycle Routes** (as applicable)

Refer to **15. Long distance bicycle route and tourism**

Attachment E provides supporting documentation for Item 15.

Label attachment as **E- Long Distance Bicycle Routes** - No more than 5 pages.

☐ **Attachment F – Project Sponsor Resolution** (required)

Refer to **16. Project Sponsor Resolution**. Attach the commitment from the Project Sponsor

Label attachment as **F- Project Sponsor Resolution** - No more than 10 pages.

☐ **Attachment G – Public Outreach and Support** (required)

Refer to **17. Public Involvement and Support**.

Attachment G may include:

- public engagement summary (required)
- letters of support from stakeholders elected officials, community leaders, bike/ped stakeholders, school officials, PTA, affected/adjacent property owners, etc. (as needed)
- supporting documentation of public outreach (as needed)

Label attachment as **G- Public Outreach and Support** - No more than 10 pages.

☐ **Attachment H – Maintenance Documentation** (as applicable)

Refer to **18. Maintenance and operation**. Attach the letter of commitment from any third party responsible for maintenance of proposed project.

Label attachment as **H- Maintenance Documentation** - No more than 2 pages.

☐ **Attachment I – Local Planning** (as applicable)

Refer to **19. Planning**

- Attach the cover and pages from the planning document referring to this project. (as applicable)
- Attach the cover and pages from Transition Plan for ADA compliance (as applicable)

Label attachment(s) as **I- Local Planning** - No more than 10 pages.

☐ **Attachment J – MPO TIP Letter** (as applicable)

Refer to **20. MPO Transportation Improvement Program (TIP) Inclusion Letter**. Attach a letter from the MPO if the project is located within the boundaries of an MPO.

Label attachment(s) as **J- MPO TIP Letter** - No more than 2 pages.

☐ **Attachment K – Environmental Documentation** (as applicable)

Refer to **21. Environmental Documentation**

- If Yes is selected for either 21a, 21b, or 22c, then attach a written description of potential coordination, mitigation, and/or permitting actions foreseen for the proposed project.

Label attachment(s) as **K- Environmental Documentation** - No more than 10 pages.

☐ **Attachment L – Property Ownership/Acquisition** (required)

Refer to **22. Property Ownership and Acquisition Information**

Attach the following exhibits, as appropriate:

- ☐ Evidence of property rights by title of ownership, lease, or easement (required)
- ☐ Description of how the property will be acquired (as applicable)
- ☐ Commitment letter(s) from affected property owners demonstrating a willingness to transfer property (as applicable)
- ☐ Letter from TxDOT District Engineer consenting to project on state ROW (as applicable)

Label attachments as **L- Property Ownership/Acquisition** - No more than 10 pages.

☐ **Attachment M - Signal, Beacons, and School Zones** (as applicable)

Refer to **23. Requirements – Signals, Beacons, and School Zones**. Attach evidence that any new traffic control devices meet warrants/conditions in accordance with the TMUTCD and TxDOT policy.

Label attachment(s) as **M- Signal, Beacons, and School Zones** - No more than 10 pages.

☐ **Attachment N - RR Support/Right-of-Entry Letter** (as applicable)

Refer to **24. Railroad Support/Right-of-Entry Letter**. Attach documentary evidence of coordination with railroad.

Label attachment(s) as **N- RR Support/Right-of-Entry Letter** - No more than 10 pages.

☐ **Attachment O - Project Timeline** (required)

Refer to **25. Project Timeline**. Attach a chart documenting the project development and implementation timeline.

Label attachment(s) as **O- Project Timeline** - No more than 2 pages.

☐ **Attachment P - Preliminary Engineering (PS&E and Environmental) Costs** (as applicable)

Refer to **29. Preliminary Engineering (PS&E Environmental) Costs**. For project sponsors with populations under 50,000, identify proposed preliminary engineering costs to be incurred by the project sponsor after project selection and after authorization to proceed. Attach documentation of estimated costs.

Label attachments **P- Preliminary Engineering (PS&E and Environmental) Costs** - No more than 2 pages.

APPENDIX A:

Additional Safety Countermeasures Resources

<https://safety.fhwa.dot.gov/provencountemeasures/>

https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/step.cfm

https://safety.fhwa.dot.gov/ped_bike/tools_solve/fhwasa18041/fhwasa18041.pdf

[https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP Guide for Improving Ped Safety at Unsig Loc 3-2018_07_17-508compliant.pdf](https://safety.fhwa.dot.gov/ped_bike/step/docs/STEP_Guide_for_Improving_Ped_Safety_at_Unsig_Loc_3-2018_07_17-508compliant.pdf)

<http://www.pedbikeinfo.org/>